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Environmental Assessment

CONSTRUCTION of a NEW ADMINISTRATIVE COMPLEX near Waldron, AR and a NON-SIGNIFICANT FOREST PLAN AMENDMENT

**Cold Springs-Poteau Ranger District, Ouachita National Forest
Scott County, Arkansas**

Township 3 North, Range 29 West, Sections 5 and 8

*This project is subject to subparts A and B of 36 CFR Part 218 Project-Level
Predecisional Administrative Review Process (objection process); it is not authorized
under the Healthy Forest Restoration Act (HFRA).*

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INTRODUCTION

Purpose and Need for Action

The purpose of this project is to better serve the visiting public and provide a more strategic location for field-going and office employees. A project-level amendment to the Revised Forest Land and Resource Management Plan for the Ouachita National Forest is needed to assign this block of land (approximately 26 acres) to Management Area #8, Administrative Sites.

This action responds to the goals and objectives outlined in the Ouachita National Forest Plan under public use and enjoyment, facilities operation and maintenance, and helps move the project area towards desired conditions described in Management Area 8: Administrative Sites/Special Uses (RLRMP, pages 25, 33-34, 66).

Proposed Action

The Forest Service proposes a new administrative site would be constructed on acquired land to serve as an office, visitor center, and a work center for the Cold Springs-Poteau Ranger District. The administrative site would include associated roads and parking areas.

Issues

The Forest Service identified no issues during scoping.

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

A “No Action” alternative was not included because it would not meet the objectives outlined in Management Area 8: Administrative Sites/Special Uses. It would also not help establish the desired conditions as outlined under public use and enjoyment and facilities operation and maintenance (RLRMP, pages 25, 33-34, 66).

Alternatives

The Proposed Action

Forest Service proposal to build an office, visitor center, work center and associated roads and parking areas on National Forest land in Sections 5 and 8, Township 3 North, Range 29 West in Scott County, Arkansas. The project is located near the junction of US Highway 71 and State Highway 28 approximately 3 miles north of Waldron, Arkansas.

Final design work has not been completed, but at this time the proposal includes an office/visitor center building of approximately 9,500 square feet, visitor parking including 4 or 5 RV-sized spaces, parking for Forest Service and employee vehicles, and associated roads. A work center and some smaller outbuildings are also planned. The exact size of facilities to be built will depend on budget constraints. Some of these facilities may not be built for several years. Total area disturbed is expected to be less than 10 acres. This facility will house Forest Service employees and will replace the leased office in Waldron, Arkansas.

The location of this facility is highly visible and is on a direct north-south route between Shreveport, Louisiana and Kansas City, Missouri. The proposed location would likely be visited by a large percentage of tourists. This proposal also includes a Revised Forest Plan amendment to assign the acquired office land (approximately 26 acres) to Management Area 8 (Administrative Sites).

This proposal is intended to provide better access for the visiting public as well as a more strategic location for field-going employees. Long-term, it will cut costs to the US Government by reducing driving distances and eliminating the need for office space that is currently being leased in Waldron, Arkansas.

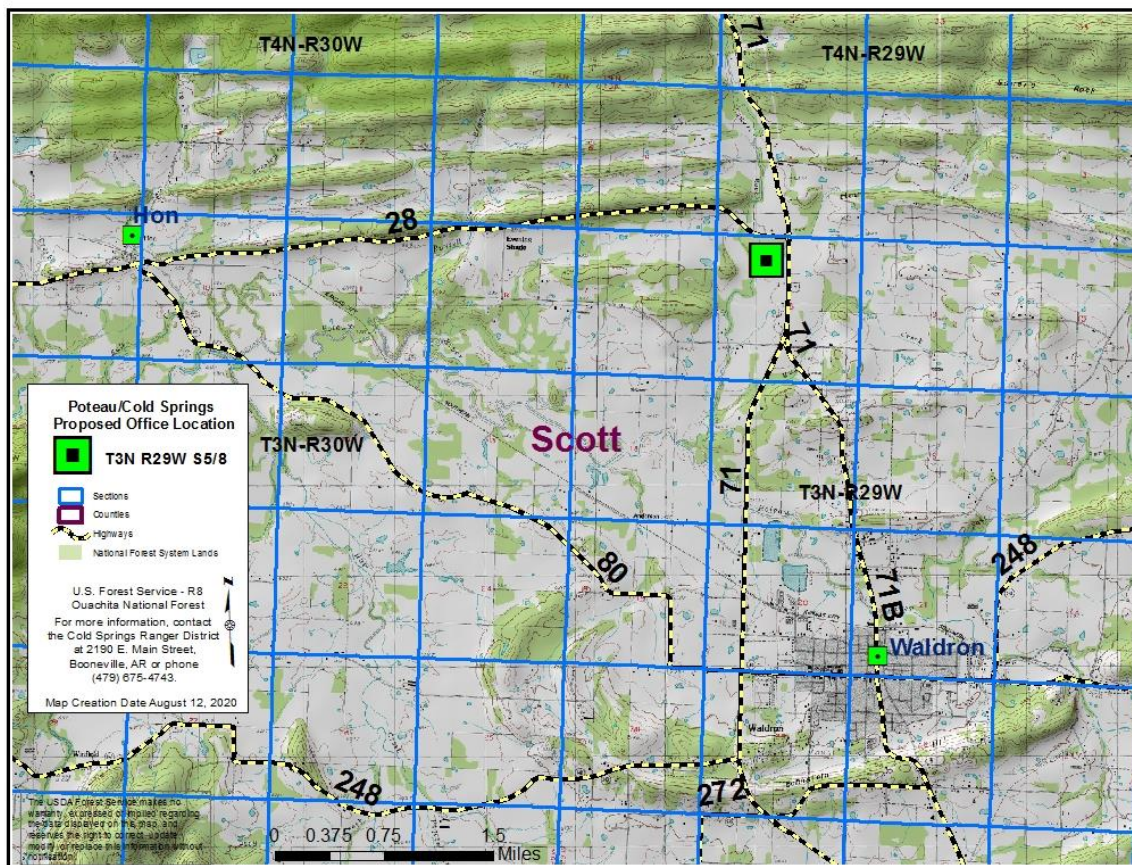


Figure 2. Vicinity Map.

Project Design Criteria

The proposal described in this Environmental Assessment (EA) along with the non-significant amendment is consistent with both the Amended Land and Resource Management Plan (ALRMP) and its Amendment #4, Management Direction for Acquired Lands in Waldron, Arkansas.

Project Objective Requirements

- The project must provide improved visibility and access to visitors, including those with large vehicles such as campers and those with disabilities.
- The location must provide safe ingress and egress from the highway.
- The project must be located somewhat centrally to the public land base to provide for a more efficient use of employee time and vehicles.
- The setting must be aesthetically pleasing, to give visitors a favorable experience.

ENVIRONMENTAL CONSEQUENCES

Project Issue Effects

The Forest Service Manual (FSM) defines MIS as, “any species, or group of species, or species habitat element selected to focus management attention for the purpose of resource production, population recovery, maintenance of population viability, or ecosystem diversity.” Land managers are directed to select management indicators for a Forest Plan or project that best represent the issues, concerns, and opportunities to support recovery of Federally-listed species, provide continued viability of sensitive species, and enhance management of wildlife and fish for commercial, recreational, scientific, subsistence, or aesthetic values or uses. “Management indicators representing overall objectives for wildlife, fish, and plants may include species, groups of species with similar habitat relationships, or habitats that are of high concern.” See the current Ouachita National Forest Management Indicator Species list below.

Management Indicator Species (MIS) and Associated Purposes

Life form	Scientific name	Common name	Selected for this project? (YES/NO)
DEMAND SPECIES			
Bird	<i>Colinus virginianus</i>	Northern Bobwhite	YES
Bird	<i>Meleagris gallopavo</i>	Eastern wild turkey	YES
Fish	<i>Micropterus dolomieu</i>	Smallmouth bass	NO
Mammal	<i>Odocoileus virginianus</i>	White-tailed deer	YES
VIABILITY CONCERN SPECIES – ADDRESSED IN T&E SECTION OF THIS EA			
Bird	<i>Picoides borealis</i>	Red-cockaded woodpecker	NO
ADEQUATE EARLY FOREST STAGE COVER			
Bird	<i>Colinus virginianus</i>	Northern Bobwhite	YES
Bird	<i>Dendroica discolor</i>	Prairie warbler	NO
ADEQUATE MATURE PINE FOREST COVER			
Bird	<i>Dryocopus pileatus</i>	Pileated woodpecker	NO
Bird	<i>Picoides borealis</i>	Red-cockaded woodpecker (MA 22)	NO
Bird	<i>Piranga olivacea</i>	Scarlet tanager	NO
ADEQUATE MATURE HARDWOOD FOREST COVER			

Life form	Scientific name	Common name	Selected for this project? (YES/NO)
Bird	<i>Dryocopus pileatus</i>	Pileated woodpecker	NO
Bird	<i>Piranga olivacea</i>	Scarlet tanager	NO
RECREATIONAL FISHING QUALITY (LAKES AND PONDS)			
Fish	<i>Lepomis macrochirus</i>	Bluegill	NO
Fish	<i>Lepomis microlophus</i>	Redear sunfish	NO
Fish	<i>Micropterus salmoides</i>	Largemouth bass	NO
HABITAT QUALITY OF STREAMS: ARKANSAS RIVER VALLEY HABITAT CATEGORY			
Fish	<i>Ameiurus natalis</i>	Yellow bullhead	NO
Fish	<i>Campostoma anomalum</i>	Central stoneroller	NO
Fish	<i>Etheostoma whipplei</i>	Redfin darter	NO
Fish	<i>Lepomis cyanellus</i>	Green sunfish	NO
Fish	<i>Lepomis megalotis</i>	Longear sunfish	NO
HABITAT QUALITY OF STREAMS: GULF COASTAL PLAIN -- HABITAT CATEGORY NOT IN DOGWOOD			
Fish	<i>Aphredoderus sayanus</i>	Pirate perch	NO
Fish	<i>Campostoma anomalum</i>	Central stoneroller	NO
Fish	<i>Erimyzon oblongus</i>	Creek chubsucker	NO
Fish	<i>Lepomis cyanellus</i>	Green sunfish	NO
Fish	<i>Lepomis megalotis</i>	Longear sunfish	NO
HABITAT QUALITY OF STREAMS: OUACHITA MOUNTAINS -- HABITAT CATEGORY NOT IN DOGWOOD			
Fish	<i>Campostoma anomalum</i>	Central stoneroller	NO
Fish	<i>Etheostoma nigrum</i>	Johnny darter (w/in leopard darter range only)	NO
Fish	<i>Etheostoma radiosum</i>	Orangebelly darter	NO
Fish	<i>Etheostoma whipplei</i>	Redfin darter	NO
Fish	<i>Fundulus catenatus</i>	Northern studfish	NO
Fish	<i>Hypentilium nigricans</i>	Northern hog sucker	NO
Fish	<i>Lepomis cyanellus</i>	Green sunfish	NO
Fish	<i>Lepomis megalotis</i>	Longear sunfish	NO
Fish	<i>Luxilus chrysocephalus</i>	Striped shiner	NO
Fish	<i>Micropterus dolomieu</i>	Smallmouth bass	NO
Fish	<i>Percina copelandi</i>	Channel darter (w/in leopard darter range only)	NO

Note that several MIS appear under more than one habitat or purpose category.

MIS selected for this project - The Ouachita National Forest MIS list was reviewed, and a subset of categories and associated MIS was selected for this project. The right column in the table above indicates which MIS were selected for this project. The following MIS categories and their associated MIS were eliminated from further consideration because they do not occur on National Forest land in this project area: The remaining categories are represented in the project area and summarized in the table below.

	COMMON NAME	PURPOSE OF SELECTION
1.	Bobwhite quail	Demand Species and Adequate Early Forest Stage Cover
2.	Eastern wild turkey	Demand Species
3.	White-tailed deer	Demand Species

Effects of the PROPOSED ACTION

The proposed action would result in the reduction of up to 10 acres of habitat for these three demand species. The approximate change in acreage of habitat is expected to remain stable for the foreseeable future.

**EFFECTS ON MIS IN THE CONTEXT OF FOREST-WIDE TRENDS
(USDA FOREST SERVICE, SEPTEMBER 2017)**

The Northern bobwhite has experienced population declines across Arkansas due to decreases in early seral stage habitats. Northern bobwhite Breeding Bird Census data indicates a decreasing quail population since 1997, while estimated habitat capability for the species reflects a modest increase since FY 2006. However, habitat capability is still far from reaching the projected FY 2015 desired forest-wide capability of 101,748 based on the 2005 Forest Plan. Habitat capability for the Forest should improve with the implementation of the Revised Forest Plan, which prescribes an increase in the number of acres of early seral stage habitat. Habitat capability for Northern bobwhites, as estimated by COMPATS, has increased slightly since 2005. Although the creation of early successional habitat is showing a slight upward trend, this habitat enhancement has not yet reached the Plan objective of 5,500 acres per year. This modest but increasing population trend for the Forest could be due to habitat improvements, which have resulted from aggressive prescribed burning and thinning programs elsewhere on the ranger district. The Proposed Action would result in an extremely small reduction of habitat for the Northern bobwhite on a Forest-wide scale. The Proposed Action would not result in a significant change in Forest-Wide trends for this species.

The Eastern wild turkey population has fluctuated over the last 5 years (2013-2017). Reproduction has varied from a low of less than 1.0 poults per hen in 2015 to a high of 2.6 poults per hen in 2014. Decreases in turkey harvest and birds detected on the Landbird Points data indicate a reduction in the number of turkeys forest-wide. Still, habitat capability remains above the level projected in the 2005 Forest Plan. The sustained high levels of habitat capability may indicate that the reductions in poults per hen and birds detected on the Landbird Points are due to factors other than habitat suitability or availability. The Proposed Action would result in an extremely small reduction of habitat for the Eastern wild turkey on a Forest-wide scale. The Proposed Action would not result in significant change in Forest-Wide trends for this species.

The Ouachita National Forest habitat capability for White-tailed deer was calculated at 38,303 deer in 2017. This estimated habitat capability for was slightly above the Forest Plan's desired habitat capability of 38,105. Deer harvest records over the last few years indicate an upward trend. Current habitat capability for white-tailed deer still exceeds Forest Plan objectives for deer per square mile. The Proposed Action would result in an extremely small reduction of habitat for the White-tailed deer on a Forest-wide scale. The Proposed Action would not result in significant change in Forest-Wide trends for this species.

Public Health or Safety

During project implementation, construction workers and engineers or representatives may have certain safety hazards, such as working around heavy equipment and general slips, trips, and falls. At

project completion, parking and handicap spaces will enhance the safety and accessibility for the public. This will also enhance the ability to enter and exit the area in an emergency.

Recreation and Visual Resources

Present Conditions

Recreation in Scott County, Arkansas includes camping, fishing, horseback and OHV riding, Boating, swimming, hiking, wildlife watching, sport shooting, and hunting. Most of these activities occur at the Little Pine, Jack Creek, Knoppers Ford recreation areas, Dutch Creek day use, and the three popular OHV trails (Bell Starr, Sugar Creek, and Fourche Mountain). Scott County, Arkansas is about 128 miles from Little Rock, Arkansas and 272 miles from Dallas, Texas and is a popular getaway for people escaping the cities and overused areas.

The current Forest Service offices are in Waldron, Arkansas and Boonville, Arkansas. Neither have a high rate of visitation due to location, and neither office is suitable for seasonal influxes of public traffic. The site selected in the Proposed Action for the new office and visitor center is a grassy field with a few trees along the fence line and watershed. It is normally utilized by permit for hay cultivation of a local farmer and is located on the north side of Waldron, Arkansas.

Effects of the Proposed Action

The visual resource would be affected for a short term by the construction of the new facilities, particularly by the homeowner that is across the road to the north of the site and traffic that passes through on State Highway 28 and State Highway 71. The short-term effect would also disturb any local fishermen that might choose to fish in the Square Rock Creek and Clear Creek corridor along the property. This would be due to the presence of construction equipment, removal of trees, and ground disturbance. After completion, conditions would return and be more inviting for each of these users.

Upon completion of the new facilities, the positive effect is a more sustainable ability to provide information to the public and the location will be more convenient to users in the Poteau Mountain area. The new facility will also attract more people into the office, thus increasing the rate of visitation, increase public satisfaction, and in turn increasing knowledge of rules and regulations across the district. The land value for the neighboring partials would also increase.

Unique Characteristics of the Geographic Area

There are no park lands, prime wetlands, roadless areas, wild and scenic rivers, archeological sites, or ecologically critical areas in the geographic area. The area chosen is good farmland which hay is harvested on currently. The project area is over 8 miles away from Wilderness.

Quality of the Human Environment

The effects of the proposed activities are not known to be controversial in the scientific community.

Uncertainty

There are no effects that are highly uncertain or involve unique or unknown risks. The project is not currently set to be unique or unusual. The Forest Service has experience implementing these actions in areas with similar features. The environmental effects to the human environment are fully analyzed in this EA.

Precedent for Future Actions

This project neither establishes a precedent nor represents a subsequent decision in principle about future actions. However, basic maintenance including ground disturbance activities and soil stabilization efforts may be undertaken if erosion or maintenance problems are identified in the future.

Cultural Resources

A Cultural, Historic, and Heritage Resource survey has been completed and will be forwarded to the State Historic Preservation Officer (SHPO) and affected Tribal entities.

Threatened, Endangered, and Sensitive Species

Introduction

The Project Area has the potential to be habitat for 7 species listed on the Ouachita PETS List. The Ouachita PETS List is attached to the Biological Evaluation of this Project. The BE is an attachment to this EA and is incorporated as reference (Garrett, September 2020).

TABLE 1: Species to Be Evaluated in this Biological Evaluation

Number of Species for this BE	Scientific Name	Common Name
T&E SPECIES requiring FWS Concurrence (1)		
1	<i>Nicrophorus americanus</i>	American burying beetle
SENSITIVE SPECIES		
TERRESTRIAL ANIMAL SPECIES (2-4)		
2	<i>Perimyotis subflavus</i>	Tricolored Bat
3	<i>Danaus plexippus</i>	Monarch Butterfly
4	<i>Callophrys irus</i>	Frosted Elfin Butterfly
RIPARIAN PLANT SPECIES (5-7)		
5	<i>Amorpha ouachitensis</i>	Ouachita false indigo
6	<i>Vernonia lettermannii</i>	Narrowleaf ironweed
7	<i>Vitis rupestris</i>	Sand grape

1. American burying beetle – Endangered insect species

Present Conditions

In the fall of 1992, the first American burying beetle was captured on the Cold Springs Ranger District in Logan County. Scott County was added as an occupied county the same year. In 1993 approximately 30,000 acres on the Ouachita NF were surveyed with only seven captures, primarily on the Cold Springs RD (USDI Fish & Wildlife Service 1994). Otherwise, the majority of ABB captured in Arkansas were taken on Fort Chaffee, south of Fort Smith, Arkansas (USDI Fish & Wildlife Service 1994). During the period 1992-1996, 73 ABBs were captured on the Cold Springs RD (Carlton and Rothwein 1998). ABB occurrences have been concentrated east of Highway 71N and north of Highway 80 on the Cold Springs RD (District survey monitoring records show sites where ABB survey lines are located). Additional surveys have been conducted every year since the first capture. ABB surveys from 1992 through the present continue to find ABB on an irregular basis.

These captures have generally occurred close to private open pastureland or near recent regeneration cutting. There has been ABB surveys conducted at 6 different locations within and adjacent to the project area and no ABBs have been captured. The nearest ABB capture to the project area was trapped in 1996 at compartment 1236 stand 11 over 2 miles away.

By what is currently known about the ABB habitat needs, it would appear that restored shortleaf pine/bluestem grass habitat would be optimum ABB habitat but surveys have found very few ABB in MA 22.

The ABB has been found in a variety of habitats, including grassland, upland forest, bottomland forest, edge, and regeneration areas. ABBs are considered habitat generalists and will forage in any habitat available (Lomolino et al. 1995). Breeding requirements are not so general, and it appears as if breeding sites may be more specialized.

Reproduction success depends upon the availability of vertebrate carrion of an appropriate size and weight (optimum weight is between 100 and 200 grams). It is possible that this species would most likely be found near dense breeding aggregations of optimally sized vertebrate species. The presence of a grass-forb understory, regardless of overstory type, is a major factor in the occurrence of the ABB. Forests with thick midstories have proven to be poor habitat due to limiting flight. Availability of prey and soil type also influences ABB occurrence.

The ABB is nocturnal, and the western population is active from late April to late September. ABBs exhibit a high level of parental care to their young. At night, they are attracted by smell to carrion. Both adults will prepare the brood rearing chamber, and the female will remain in the nest until the young complete larval development. It is possible that adult ABBs can raise two broods per year. Presumably, young adult beetles burrow into the soil to over winter (USDI Fish & Wildlife Service 1994).

ENVIRONMENTAL EFFECTS

PROPOSED ACTION

The entire project area is outside of the American Burying Beetle Area (ABBA). The 26-acre field that is the proposed project area is currently suitable habitat for the ABB. However, prior to the Forest Service purchasing this property in 2010 ABB habitat at the project area was extremely poor due to this property being over grazed by cattle. The project area is completely surrounded by private land and suitable ABB habitat is highly fragmented due to current land use practices (over grazing, development and urbanization). It is unlikely that there would be any **direct** effects to the ABB by constructing the purposed administrative complex since it is unlikely that an ABB would be present in the project area. However, in the unlikely event that an ABB was present in areas where ground disturbing activities were occurring it would be possible that an ABB could be **directly** harmed. **Indirectly**, implementing the proposed action would permanently reduce potential ABB habitat on the 10 acres proposed for ground disturbance and development.

2. Tri-colored Bat– Sensitive mammal (bat) species

Present Conditions

The tricolored bat is a common species in the Ouachita Mountains and has been documented in every county of the region. The Ouachita NF hosted Bat Blitz events in both 2003 and 2005 where this species was commonly observed. During the 2005 Bat Blitz 12 tricolored bats were captured in mist nets accounted for approximately 3% of all bats captured. Acoustic surveys conducted in the summer of 2009 documented 74 tricolored bat occurrences which accounted for approximately 12% all bats

detected during the surveys. Tricolored bats have also been found during hibernacula surveys conducted on the Ouachita NF and were documented as the most common species present in those surveys. The largest known hibernating population of tricolored bats on the Ouachita NF is located at Bear Dens Cave in Leflore County, Oklahoma where over 279 individuals were recorded during a survey conducted February 26, 2018. At least 7 of those tricolored bats were definitely affected with White Nose Syndrome (WNS) and there were a minimum of 4 tricolor bats found dead. This was the first confirmed report of WNS in Leflore County. Historically, the largest known hibernating population of tricolored bats in the Ouachita Mountains resided at Pip Mine. Pip Mine is located on private property approximately 50 feet from the Ouachita National Forest boundary in Polk County, Arkansas. The average hibernating population of tricolored bats at Pip Mine is 741 individuals. The largest number of tricolored bats ever recorded at Pip Mine was 1,392 in 2014. Samples collected during the 2014 visit to Pip Mine came back positive for WNS. Pip Mine was surveyed again in the winter of 2017 where only 6 tricolored bats were observed, which is a population decrease exceeding 99%.

The tri-colored bat is a generalist insectivore that commonly eats small beetles, wasps, flies and moths (Sealander and Heidt, 1990). They use echolocation to find and capture prey most commonly while in flight (Fujita and Kunz 1984). This species often forages over waterways and forest edges in both partially harvested and stands that have not been recently harvested. These bats usually roost in trees during the summer and rarely use buildings and other man-made structures (Sealander and Heidt, 1990). General summer roosting habitat is characterized as timber stands greater than or equal to 50 years of age with a hardwood component present. More specifically, both live and dead hardwood trees that have clusters of dead leaves being retained are preferably selected for roosting. This species appears to avoid roosting in industrial pine plantations. However, research in the Ouachita Mountains found that maternity colonies of females occasionally roosted in clusters of dead pine needles in the canopy of both live and dead over story pines (Perry and Thill, 2007b). Major threat to this species includes human disturbance during hibernation and White Nose Syndrome.

ENVIRONMENTAL EFFECTS

PROPOSED ACTION

The 26-acre field that is the proposed project area only has trees that are suitable for roosting and maternity along sections of the property boundaries and no trees exist where the proposed ground disturbance would take place. Therefore, tricolored bats would not be **directly** harmed while constructing the proposed administrative complex. Habitat suitable for hibernation (caves, mines and cavelike areas) does not exist within this project area. Thus, this species would be absent from the project area during the inactive season. **Indirectly**, impacts from noises associated with mechanical activities and/or general human interaction during construction and after would likely not disrupt roosting and maternity behavior due to the distance between suitable roosting /maternity trees and the construction site. Some habitat for the insect prey base will be lost due to the construction that would take place. However, the remainder of the habitat at project area would not change and would continue to provide habitat for the insect prey base and provide foraging opportunities for the tricolored bat.

3. Monarch Butterfly – Sensitive insect species

Present Conditions

The life cycle of the monarch butterfly is similar to other butterflies, except for their phenomenal migration. An adult female monarch butterfly lays eggs on milkweed plants (*Asclepias* spp.). The egg hatches as a larva (caterpillar) in approximately four days. The larva feeds on the milkweed for 9 to 14 days before seeking a sheltered spot to turn into a pupa (chrysalis). After 9 to 15 days an adult

butterfly emerges from the pupal case. Monarchs have four to five reproductive generations per year. Adults in the summer generations live for two to five weeks and mate at three to eight days old. Adults in the migratory (overwintering) generation may live up to nine months, but do not mate and lay eggs until the following spring. Adults may mate multiple times (USDI Fish and Wildlife Service, 2018).

Monarchs will begin migrating through Arkansas in late August/early September as they make their way from northern U.S. and Canada to their overwintering grounds in Mexico. Peak fall migration is typically around the first and second week of October, but this may change slightly from year to year depending on weather patterns. In spring, they will begin migrating north, making their way into Arkansas in early April. Many will stop and breed here wherever they can find milkweed plants. Though the species may be found throughout the summer here, most monarchs will continue traveling north (Arkansas Game & Fish Commission, 2017).

Spring nectar sources typically include *Coreopsis* spp., *Viburnum* spp., *Phlox* spp., and, early blooming milkweeds. Important nectar sources during the fall include goldenrods (*Solidago* spp.), asters (*Symphyotrichum* spp. and *Eurybia* spp.), gayfeathers (*Liatris* spp.), and coneflowers (*Echinacea* spp.) and frostweed (*Verbesina virginica*). Cultivated crops such as alfalfa, clover, and sunflower are also important resources (USDI Fish and Wildlife Service, 2018).

Threats to this species including habitat loss at breeding and overwintering sites, disease, pesticides and logging at overwintering sites (USDI Fish and Wildlife Service, 2018).

ENVIRONMENTAL EFFECTS

PROPOSED ACTION

It is unlikely that there would be any **direct** impacts during the construction of a new administrative complex to adult butterflies since they are highly mobile. However, there is the possibility of harming eggs and larvae if the Proposed Action occurs during the reproductive season. **Indirect** impacts would result in the loss of up to 10 acres of habitat for the monarch due to development. The remainder of the 26-acre project area would continue to provide feeding, reproductive and resting habitat for the monarch.

4. Frosted Elfin Butterfly – Sensitive insect species

Present Conditions

During the past two years, the US Fish and Wildlife Service (FWS) has been working on the Species Status Assessment (SSA) for this butterfly and have been conducting distribution surveys. These surveys documented this species occurrence at multiple locations within and around the Ouachita NF (personal Communications, US Fish and Wildlife Service, Conway Field Office, February 2020). This species occupies open woods, forest edges, fields and scrub habitats and is a generalist nectar feeder utilizing many different flowering species. They perform one flight from March-April in the south and May-June in the north (Butterflies and Moths of North America, 2020). After mating, adult females visit multiple host plants where they deposit a single egg, usually nestled in the apical shoot of a wild indigo plant or among the young flower stalks and buds of lupine. The duration of the egg and larval stages varies with temperature, but eggs generally hatch into larvae within 2 weeks of spring adult emergence. Somewhere between late spring to late July, depending on where it occurs

within its range, Larvae pupates in the leaf litter or soil at the base of the host plant and remain in pupal diapause until the following spring.

Lupine and indigo are regarded as fire adapted and vigorously resprout following fire and produce higher biomass and a larger overall ground cover in frequently burned environments. Furthermore, a multi-year rotational burn cycle would aid in overall goals of fuel reduction and fit into a grander objective of greater biodiversity through increased habitat heterogeneity (M.D. Thom, J.C. Daniels, L. N. Kobziar, and J. R. Colburn. May 2015). The major threat to the frosted elfin is loss of habitat from development, succession, and fragmentation. Fire management of these areas can impact the butterflies if done poorly (U.S. Fish & Wildlife Service. March 2019).

ENVIRONMENTAL EFFECTS

PROPOSED ACTION

Habitat for the frosted elfin at the project area is extremely poor due to ground cover species composition and land use practices. The ground cover species composition of the project area is mostly made up of improved pasture species such as bermuda grass and fescue. Some native grass and forb species such as broom sage and green briar does exist. However, suitable host plant species (wild indigo) have not been found during sites visits to the project area. Prior to the Forest Service purchasing the property in 2010 the land was over grazed by cattle. Since then hay lease permits have been issued allowing multiple cutting per season. Therefore, it is unlikely that the frosted elfin exist at the project area but **direct** impacts to individuals would likely occur if present during the construction of a new administrative complex. **Indirectly**, the development of up to 10 acres of the project area would result in the permanent loss of habitat that could be restored to a more suitable habitat for this species.

5-7. SENSITIVE RIPARIAN PLANT SPECIES

5	<i>Amorpha ouachitensis</i>	Ouachita false indigo
6	<i>Vernonia lettermannii</i>	Narrowleaf ironweed
7	<i>Vitis rupestris</i>	Sand grape

Present Conditions

All three of these sensitive riparian plants are endemic species to the Ouachita Mountains and are locally abundant. Habitat for these three sensitive riparian plant species is an ever-changing dynamic. These species are dependent on flood events to maintain and create suitable habitat. Flood event remove competing plants that are not as well adapted to tolerate such conditions. Floods may create new sites suitable for these species by moving rock and sediment downstream while at the same time destroying currently suitable habitat. Threats to these species would be similar to those for fish and mollusks. Prohibited off-road motorized vehicles use along creeks can also have a detrimental impact on these species. These species are protected through the implementation of Revised Forest Plan Standards for protection of streamside zones.

ENVIRONMENTAL EFFECTS

PROPOSED ACTION

All activities associated with the construction of an administrative complex will occur in upland habitat away from the riparian habitat used by these species. No **direct** or **indirect** impacts to these sensitive riparian area plant species would occur.

PETS Species Summary of Determinations of the Proposed Action

Species evaluated in this BE	Scientific Name	Common name	Determination
1	<i>Nicrophorus americanus</i> Endangered	American burying beetle	Not Likely to Adversely Affect
2	<i>Perimyotis subflavus</i>	Tricolored	May impact individuals but is not likely to cause a trend to Federal listing or a loss of viability
3	<i>Danaus plexippus</i>	Monarch Butterfly	May impact individuals but is not likely to cause a trend to Federal listing or a loss of viability
4	<i>Callophrys irus</i>	Frosted Elfin Butterfly	May impact individuals but is not likely to cause a trend to Federal listing or a loss of viability
RIPARIAN PLANTS 5-7	<i>Amorpha ouachitensis</i> , <i>Vernonia lettermannii</i> , & <i>Vitis rupestris</i>	Ouachita false indigo, Narrowleaf ironweed, & Sand grape	No Impact

Cumulative Effects in Project Area

One cumulative effect would be the reduction of a single hay permit, which in turn reduces the local availability of hay and a very small reduction in revenue for the management of that permit. The lessee has known from the beginning that this was the site chosen for the new facilities and has plenty of time to make alternate arrangements.

There are no other known or expected activities within the geographic bounds and timelines that would contribute to a cumulative effect on project area MIS, public health or safety, recreation or visual resources, quality of the human environment, cultural resources, or TE&S species.

Federal, State, or Local Laws

The Proposed Action, as outlined in this EA, is consistent with other Federal, State, and local law requirements imposed for the protection of the environment. The Proposed Action is also consistent with the Ouachita National Forest RLRMP desired conditions, and its non-significant amendment #4.

CONSULTATION AND COORDINATION

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

ID TEAM MEMBERS:

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FEDERAL, STATE, AND LOCAL AGENCIES:

Arkansas Department of Health

Arkansas Historic Preservation Program

TRIBES:

Caddo Nation of Oklahoma

The Chickasaw Nation

The Choctaw Nation of Oklahoma

The Osage Nation

Quapaw Tribe of Oklahoma